



The
Patent
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INVESTOR IN PEOPLE

PN - SU1790638 A3

AN - 94-098780 [12]

TI - Device for ***electrochemical*** ***machining*** of cavities in long components - having additional electrode, which increases the range of component lengths, by supplying current at twice previous current strengths

PA - (URAI) URALS PIPE IND RES

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IC - C2SD-019/00

AB - SU1790638 The device comprises an electrolyte feed pump, component clamps, a current lead (4), electrode (1), with an insulated current lead, flexible and continuous in the transverse direction, and a carriage and magnet, i.e. magnet (16) for transversing the electrode inside the workpiece cavity, having provision for changing its direction of motion. The device has an additional electrode (1) with a separate traversing means, an insulated current lead, and a seal. The electrodes are joined to each other, and the seal is mounted on the same side as the electrolyte pump. In order to increase output in machining non-magnetic materials the device is provided with a carriage with a magnet (16) and linkage for pulling the electrode through the workpiece tube. The device increases output by 45-60%, and can be used on the industrial scale in the production of tubes of dia. 5 x 1 mm to 10 x 1.5 mm having stringent surface finish requirements, e.g. with bright surfaces for transport of especially pure substances in radio technology and other sectors of industry, and also for electrodeposition on the internal surfaces of tubes in the atomic energy industry, and in the machining of tubes with curved sections.

USE/ADVANTAGE - In electrochemical machining of tubes of dia. 3-8 mm, in electrochemical polishing, and in electrodeposition, in metallurgy, engineering, radio technology, and the atomic energy industry. Increases range of component lengths, by supplying current of twice previous strengths, without overheating of the current leads, and gives increased output.

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